

DEPARTMENT OF THE ARMY

US ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE 5158 BLACKHAWK ROAD ABERDEEN PROVING GROUND MD 21010-5403

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1 3 MAY 2005

MEMORANDUM FOR Commander (AEUSG-HD), 411th Base Support Battalion, Unit 29245, APO AE 09102

SUBJECT: Environmental Management System (EMS) Partial Conformance Audit No. 37-EF-01TW-05, 411th Base Support Battalion, 7-11 March 2005

- 1. Five copies of the subject report are enclosed.
- 2. Comments or concerns regarding the audit may be directed to Mr. Brian D. Jones, Hazardous and Medical Waste Program, USACHPPM, at DSN 584-3651 or commercial (410) 436-3651.

FOR THE COMMANDER:

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U.S. Army Center for Health Promotion and Preventive Medicine



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ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)
PARTIAL CONFORMANCE AUDIT
37-EF-01TW-05
411TH BASE SUPPORT BATTALION

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CHAPTER 1 EXECUTIVE SUMMARY

1.1 INTRODUCTION.

With the signing of Executive Order (EO) 13148, *Greening the Government Through Leadership in Environmental Management*, on Earth Day 2000, the U.S. Army began to place additional emphasis on the development of viable environmental management systems (EMS) at many Army installations. The EO requires an EMS to be in place at each appropriate facility by 31 December 2005. To facilitate meeting this deadline, Army policy dated 13 July 2001 established a series of intermediate milestones that, if met, would result in an EMS being in place by the 31 December 2005 deadline. These intermediate milestones consisted of the following:

- Develop an ISO 14001–conformant environmental policy statement, consistent with the Army EMS action memorandum, signed by the commander, NLT 30 September 2003.
- Complete an installation-wide EMS self-assessment with appropriate documentation, signed by the commander, NLT 30 March 2004.
- Complete a written EMS implementation plan with defined dates, identified resources, and organizational responsibilities for implementing a mission-advancing, ISO 14001–conformant EMS, signed by the commander, NLT 30 September 2004.
- Compile a prioritized list of environmental aspects NLT 30 March 2005.
- Establish a documented procedure NLT 30 March 2005 and follow it to ensure appropriate installation personnel have received EMS awareness training.
- Complete at least one management review in accordance with the installation's documented policy for recurring internal EMS management reviews NLT 31 December 2005.

In addition to having an EMS in place by 31 December 2005, the Army policy also required each facility to be in full conformance with the ISO 14001 Standards by 30 September 2009. The policy did not require third party registration under the ISO 14001 standard.

1.2 SUMMARY OF AUDIT FINDINGS.

The 411th Base Support Battalion (BSB) has made significant progress towards meeting the 31 December 2005 deadline to have an EMS in place as required by EO 13148. Of the six intermediate milestones established by Army policy, the 411th BSB has accomplished five of them. The only step left to implement in order to have an EMS in place by 31 December 2005 is the management review.

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To have a fully conformant EMS in place by 30 September 2009 as required by Army policy, significant, but not insurmountable, work still remains. During this partial conformance audit, 14 findings were found. It should be noted that many of the shortcomings identified during the audit simply had not yet been conducted because they rely on the completion of earlier steps, but conformance with the standard can be expected once the EMS has been fully implemented.

The 14 findings were based on the following sections of the American National Standards Institute (ANSI)/ISO 14001-1996 standard: 4.2 (Policy); 4.3.1 (Environmental Aspects); 4.3.3 (Objectives and Targets); 4.4.2 (Training, Awareness, and Competency); 4.4.3 (Communication); 4.4.4 (Environmental Management System Documentation); 4.4.5 (Document Control); 4.4.6 (Operational Control); 4.5.1 (Monitoring and Measurement); 4.5.2 (Nonconformance and Corrective and Preventive Action); 4.5.3 (Records); 4.5.4 (Environmental Management System Audit); 4.6 (Management Review).

The table summarizes the partial conformance audit findings and observations.

1.3 ANNUAL EMS SURVEILLANCE AUDITS.

Annual external surveillance audits are recommended to document EMS implementation progress and to determine future conformance of the 411th BSB EMS to the ISO 14001 standard.

TABLE - SUMMARY OF FINDINGS AND OBSERVATIONS FOR THE 411^{TH} BSB

FINDINGS AND OBSERVATIONS	S AND OBSERVATIONS FOR THE ISO 14001 REFERENCE		
FINDINGS AND OBSERVATIONS	Section	Title	POTENTIAL RESOLUTION
The 411 th has begun implementing an EMS based on the ANSI/ISO 14001-1996 standard. The 411 th BSB EMS maintains an Implementation Plan and a series of EMS guidance documents to implement the ISO 14001 Standards. However, not all of the guidance documents were in place at the time of this audit. There was one finding for this element of the EMS.	4.1	General Requirements	Continue with implementation of the 411 th BSB EMS.
The 411 th Environmental Policy has not been effectively communicated to all employees. Several interviewees were not familiar with the contents of the Environmental Policy Statement.	4.2(e)	Environmental Policy	The policy must be effectively communicated to ALL echelons, to include contract personnel working on behalf of the organization.
Procedures to identify targets and objectives have been developed, but specific targets and objectives have not yet been identified.	4.3.3	Objectives and Targets	Identification of targets and objectives is scheduled for the next Cross Functional Team (CFT) meeting.
Procedures to develop and maintain management programs with respect to their objectives and targets had been developed, but not yet been implemented.	4.3.4	Environmental Management Programs	Management programs will be implemented once objectives and targets have been developed.
General awareness training has been provided to senior leadership, not all personnel have received awareness training nor has competence training been provided for personnel who could have a direct impact on significant aspects.	4.4.2	Training, Awareness, and Competence	Additional general awareness training will be required for all personnel and competence training will be required for individuals who could have a direct impact on significant aspects; making the EMS web based training available on the BSB web site will greatly assist in reaching all BSB personnel.
Internal and external communication procedures have been established, however, a documented procedure for tracking communication with external parties did not exist.	4.4.3	Communication	Development of an external communication log will provide consistency in documenting communication with external parties.

EINDINGS AND ODSEDVATIONS	ISO 14001 REFERENCE		POTENTIAL RESOLUTION
FINDINGS AND OBSERVATIONS	Section	Title	
A functioning mechanism for describing the core elements of their EMS and their interaction was not yet in place, nor was there a mechanism for providing directions to related documentation.	4.4.4	Environmental Management System Documentation	The 411 th BSB had developed an internet site to document its EMS, but the site had not yet been activated on the 411 th BSB server. Activation was expected to occur soon after the EMS audit took place; once activated this web site will satisfy the requirements of this portion of ISO 14001 standard.
Procedures for documentation and document control have been developed, but are not yet implemented.	4.4.5	Document Control	Procedures have been developed and are being staffed; procedures must be finalized and implemented; launching the BSB EMS web site will be significant in maintaining document control.
Operational control procedures have been developed, but are not yet in place.	4.4.6	Operational Control	Procedures on how to conduct operation control have been developed and are being staffed; procedures must be finalized and implemented; in addition, operational Standing Operating Procedure SOPs (i.e. waste handling instructions) and (SOP) for significant aspects will need to be developed.
Monitoring and measuring procedures for objectives and targets have not yet been implemented.	4.5.1	Monitoring and Measurement	Procedures have been developed for the monitoring of operations that can have a significant environmental impact; however; procedures cannot be implemented until targets and objects have been identified. Proceed with identification of significant aspects, followed by development of monitoring and measuring procedures for operations and activities that can have significant impacts on the environment.

FINIDINGS AND ODSEDMATIONS	ISO 14001 REFERENCE		DOTENTIAL DEGOLUTION
FINDINGS AND OBSERVATIONS	Section	Title	POTENTIAL RESOLUTION
Procedures have not been implemented for dealing with actual and potential nonconformance and for taking corrective/preventive actions.	4.5.2	Nonconformance and Corrective and Preventive Action	Procedures have been developed for dealing with actual and potential nonconformance and for taking corrective/preventive actions, but have not yet been implemented. This phase of EMS implementation cannot occur until other phases have been completed (development of significant aspects, targets and objectives, etc.). Proceed with other phases of EMS implementation, and then proceed with this implementation of this element of the EMS.
Record control procedures have not been implemented.	4.5.3	Records	Procedures have been developed for record control (ARIMS - Army Records Information Management System), but they have not yet implemented. To achieve future conformance, the procedures will need to be implemented and maintained.
Internal EMS audits have not been performed.	4.5.4	Environmental Management System Audit	Procedures have been developed for internal audits, but internal audits have not yet been performed. To be conformant, procedures must be implemented and maintained.
Procedures have been developed for management reviews, but a management review has not yet been conducted	4.6	Management Review	The 411 th Environmental Quality Control Committee (EQCC) is extremely active, which will facilitate the management review which is expected to take place during the fall of 2005.

CHAPTER 2 BACKGROUND AND SCOPE

2.1 EXTERNAL PARTIAL CONFORMANCE AUDIT.

- 2.1.1. <u>Objectives</u>. The objective of this partial conformance audit was to evaluate the 411th BSB EMS based on the ISO 14001: 1996 standard.
- 2.1.2. <u>Roles and Responsibilities</u>. The 411th BSB is responsible for enhancing U.S. Army operational readiness in the European theater by effectively managing and conserving environmental resources, ensuring compliance and supporting environmental stewardship in the Heidelberg Military Community. The 411th BSB commander has appointed an EMS coordinator who is responsible for initiating EMS implementation. The EMS coordinator is assisted in these efforts by a Cross Functional Team (CFT) made up of representatives from key 411th BSB subordinate activities and tenants.

2.2 BACKGROUND INFORMATION.

- 2.2.1. <u>Geographical Location</u>. The 411th BSB is located in Heidelberg, Germany, in the Neckar Valley about 70 miles south of Frankfurt.
- 2.2.2. <u>Mission</u>. The 411th BSB provides base support services to military personnel and their families on U.S. military installations in Heidelberg, Germany, and surrounding communities. These locations include: Tompkins Barracks, Germersheim Army Depot, Nachrichten Barracks, Patton Barracks, Heidelberg Airfield, Hammond Barracks, Stern Kaserne, Campbell Barracks, Patrick Henry Village, and Mark Twain Village. The 411th BSB also provides support to the Defense Distribution Center-Europe located in Germersheim, Germany.

2.3 TEAM MEMBERS.

The U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) team that audited the 411th BSB EMS consisted of two individuals: Ms. Debbie Hursh, EMS-LA (Team Leader) and Mr. Brian Jones. Ms. Hursh has been certified by the Registrar Accreditation Board (RAB) as an EMS Lead Auditor (E052124) and Mr. Jones has taken and passed the Lead Auditor course and is in training for Auditor certification.

2.4 AUDIT PROCESS.

2.4.1 General.

The RAB certification of Ms. Hursh documents her qualifications based on the following: ANSI/ISO 14012 – 1996, *Guidelines for Environmental Auditing – Qualification Criteria for Environmental Auditors*.

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The USACHPPM auditors used the following standard to develop findings during the audit: ANSI/ISO 14004: 1996, *Environmental Management Systems – Specification with Guidance for Use*.

The auditing procedures used by the USACHPPM auditors during the audit included the following: (1) ANSI/ISO 14010: 1996, *Guidelines for Environmental Auditing – General Principles*; and (2) ANSI/ISO 14011: 1996, *Guidelines for Environmental Auditing – Auditing Procedures – Auditing of Environmental Management Systems*.

The ANSI/ISO 14004: 1996, Environmental Management Systems – General Guidelines on Principles, Systems, and Supporting Documentation were used for clarification purposes, as required.

2.4.2 Entrance Briefing. On 7 March 2005, the USACHPPM audit team provided an entrance briefing to the 411th BSB senior leadership and key EMS personnel. Attendees included: LTC Diane Vanderport, 411th BSB Commander; Mr. Ernest Tafoya, 411th BSB Deputy Commander; Mr. Dan Welch, Chief, Environmental Management Office (EMO), Directorate of Public Works (DPW), 411th BSB; and Ms. Catherine Osborne-Flesch, EMS Coordinator, EMO, DPW, 411th BSB.

2.4.3 EMS Partial Conformance Audit.

The USACHPPM was originally tasked with conducting a Gap Analysis for the 411th BSB, but as the auditors reviewed BSB documents it became apparent that a Gap Analysis was not warranted. However, as the BSB had not yet fully implemented their EMS, a full conformance audit could not be conducted. Therefore, it was decided to conduct a modified (or partial) conformance audit where the USACHPPM auditors would evaluate the 411th BSB EMS against the ISO 14001 standard to determine the extent of implementation with regard to the ISO 14001 standard. With this in mind, the USACHPPM audit team conducted a partial conformance audit of the 411th BSB EMS, 7-11 March 2005. The USACHPPM auditors reviewed various aspects of the 411th BSB EMS documentation and interviewed key staff members (e.g. environmental, operations, facilities, environmental, internal review, contracting, and legal functional areas) regarding specific portions of the EMS. The 411th Environmental Management System Coordinator, Ms. Catherine Osborne-Flesch, was present during the audit to clarify various aspects of the EMS to the USACHPPM auditors.

2.4.4 Exit Briefings. An exit briefing for the 411th BSB senior leadership was held on 11 March 2005. At that time, findings and observations (based on a review of the EMS documentation and interviews with 411th BSB staff members) were presented. Attendees included: Mr. Ernest Tafoya, 411th BSB Deputy Commander; Mr. Dan Welch, Chief, EMO, DPW, 411th BSB; Ms. Catherine Osborne-Flesch, EMS Coordinator, EMO, DPW, 411th BSB, and MAJ Capps, Director of Public Works, 26th Area Support Group (ASG).

CHAPTER 3 AUDIT FINDINGS

Executive Order 13148 requires that an EMS be in place at all appropriate installations by 31 December 2005. To achieve this milestone, Army guidance established a series of requirements with intermediate milestones leading up to this date. These requirements and milestones are:

- Develop an ISO 14001–conformant environmental policy statement, consistent with the Army EMS action memorandum, signed by the commander, by 30 September 2003
- Complete an installation-wide EMS self-assessment with appropriate documentation, signed by the commander, by 30 March 2004
- Complete a written EMS implementation plan with defined dates, identified resources, and organizational responsibilities for implementing a mission-advancing, ISO 14001–conformant EMS, signed by the commander, by 30 September 2004
- Compile a prioritized list of environmental aspects by 30 March 2005
- Establish a documented procedure NLT 30 March 2005 and follow it to ensure appropriate installation personnel have received EMS awareness training
- Complete at least one management review in accordance with the installation's documented policy for recurring internal EMS management reviews by 31 December 2005

By meeting these intermediate milestones, an EMS will be in place by the 31 December 2005 deadline.

The 411th BSB has already met all of the milestones listed above, except for the management review that must be completed by 31 December 2005. Based on interviews of 411th BSB senior leadership and key EMS personnel, this management review is expected to take place in time to meet the 31 December 2005 suspense.

Army policy also requires that full conformance with the ISO 14001 EMS standard be achieved by 30 September 2009. To achieve full conformance by this deadline, additional program development and maintenance will be required. The following ISO 14001 definitions apply to the various audit findings discussed in this Chapter:

<u>Continual Improvement</u>: Process of enhancing the EMS to achieve improvements in overall environmental performance in line with the organization's environmental policy (ISO 14001, Section 3.1)

Environment: Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation (ISO 14001, Section 3.2)

Environmental Aspect: Element of an organization's activities, products, or services that can interact with the environment (ISO 14001, Section 3.3)

Environmental Impact: Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products, or services (ISO 14001, Section 3.4)

Environmental Management System (EMS): The part of the overall management system that includes the organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, reviewing, and maintaining the environmental policy (ISO 14001, Section 3.5)

Environmental Management System (EMS) Audit: A systematic and documented verification process of objectively obtaining and evaluating evidence to determine whether an organization's EMS conforms to EMS audit criteria set by the organization, and for communication of the results of this process to management (ISO 14001, Section 3.6)

<u>Environmental Objective</u>: Overall environmental goal, arising form the environmental policy, that an organization sets itself to achieve, and which is quantified where practicable (ISO 14001, Section 3.7)

<u>Environmental Performance</u>: Measurable results of the EMS, related to an organizations control of its environmental aspects, based on its environmental policy, objectives, and targets (ISO 14001, Section 3.8)

Environmental Policy: Statement by the organization of its intentions and principles in relation to its overall environmental performance that provides a framework for action and for the setting of its environmental objectives and targets (ISO 14001, Section 3.9)

<u>Environmental Target</u>: Detailed performance requirement, quantified where applicable, applicable to the organization or parts thereof, that arises for the environmental objectives and that need to be set and met in order to achieve those objectives (ISO 14001, Section 3.10)

<u>Interested Party</u>: Individual or group concerned with or affected by the environmental performance of an organization (ISO 14001, Section 3.11)

<u>Organization</u>: Company, corporation, firm, enterprise, authority, or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration (ISO 14001, Section 3.12)

<u>Prevention of Pollution</u>: Use of processes, practices, materials, or products that avoid, reduce, or control pollution, which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution (ISO 14001, Section 3.13)

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3.1 GENERAL REQUIREMENTS (ISO 14001, Section 4.1)

Requirement: The organization shall establish and maintain an EMS, the requirements of which are described in the whole of the Section 4 EMS Requirements.

<u>Findings and Observations:</u> The 411th has begun implementing an EMS based on the ANSI/ISO 14001-1996 standard. The 411th BSB EMS maintains an Implementation Plan and a series of EMS guidance documents to implement the ISO 14001 Standards. However, not all of the guidance documents were in place at the time of this audit. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-01

ISO 14001 ELEMENT: 4.1 (GENERAL REQUIREMENTS)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: The 411th BSB has not completed implementing an ISO 14001 EMS.

CRITERIA: O7.1.3.A. The Installation will establish and maintain an environmental management system as described in ISO 14001-1996.

FINDING COMMENTS: The 411th BSB has not completed implementing an ISO 14001 EMS. Standard Operating Procedures (SOPs) have been developed for each of the ISO 14001 elements; however, not all of them have been implemented.

3.2 ENVIRONMENTAL POLICY (ISO 14001, SECTION 4.2)

Requirement: Top management shall define the organization's environmental policy and ensure that it:

- a. Is appropriate to the nature, scale, and environmental impacts of its activities, products, or services;
- b. Includes a commitment to continual improvement and prevention of pollution;
- c. Includes a commitment to comply with relevant environmental legislation and regulations, and with other requirements to which the organization subscribes;
- d. Provides the framework for setting and reviewing environmental objectives and targets;
- e. Is documented, implemented and maintained, and communicated to all employees;
- f. Is available to the public

<u>Findings and Observations:</u> The 411th Environmental Policy Statement, signed 8 September 2003, met all of the requirements identified in paragraphs 3.2a-f, except that it had not been communicated to all employees. While the Policy Statement had been distributed to a number of 411th personnel and subordinate activities, the Policy Statement had not been distributed to ALL 411th personnel as demonstrated by a lack of knowledge expressed by several interviewees during the audit. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-02

ISO 14001 ELEMENT: 4.2 (ENVIRONMENTAL POLICY)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: The 411th BSB Environmental Policy Statement had not been communicated to all employees. The Policy Statement, signed 8 September 2003, met all of the requirements identified in paragraphs 3.2a-f, except that it had not been communicated to all employees. While the Policy Statement had been distributed to a number of 411th personnel and subordinate activities, the Policy Statement had not been distributed to ALL 411th personnel as demonstrated by a lack of knowledge expressed by several interviewees during the audit.

CRITERIA: O7.10.1.A. When implementing ISO 14001, clause 4.2.1, installation management is required to define the organizations environmental policy and ensure that it: is appropriate for its mission; commits the installation to prevention of pollution and continual improvement; commits to compliance with environmental legislation and regulation; is documented and communicated to all employees; is available to the public.

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FINDING COMMENTS: Most personnel interviewed during the audit were aware of the premise of EMS, however they were not familiar with the actual 411th BSB EMS policy statement.

RECOMMENDATIONS: In addition to handing out hard copies of the policy statement and making it available on the 411th BSB web site, some other mechanisms that can be used to communicate the Policy Statement to all employees include:

- EMS Policy Statement posters for display at key employee assembly points (break rooms, bulletin boards, hall ways, building exits, etc);
- EMS Policy Statement magnets, with abbreviated key points of the policy, to be handed out to all incoming personnel and during EMS training sessions;
- Inclusion of the EMS Policy Statement as one of the screens that pops up during the computer log on procedure;
- Highlight key points/elements of the EMS policy statement on the EMS brochure.

3.3 ENVIRONMENTAL ASPECTS (ISO 14001, SECTION 4.3.1)

Requirement: The organization shall establish and maintain a procedure to identify the environmental aspects of its activities, products, or services that it can control and over which it can be expected to have an influence, in order to determine those which have or can have significant impacts on the environment. The organization shall ensure that the aspects related to these significant impacts are considered in setting its environmental objectives.

The organization shall keep this information up-to-date.

<u>Findings and Observations:</u> Procedure Number EMS-5.3, Environmental Management System Identification of Aspect and Impacts Procedure, provided an overview of the 411th BSB procedures for determining Environmental Aspects and Impacts. Aspects were scored to determine significant aspects. There were no findings for this EMS element.

3.4 LEGAL AND OTHER REQUIREMENTS (ISO 14001, SECTION 4.3.2)

Requirement: The organization shall establish and maintain a procedure to identify and have access to legal and other requirements to which the organization subscribes, that are applicable to the environmental aspects of its activities, products, or services.

Findings and Observations: The 411th BSB has procedures in place for identifying legal and other requirements. Procedure Number EMS-4.3.2, Procedures for Identification of Legal and Other Requirements, provides an overview for conformance to this element. The procedure provides a listing of the legal and other requirements considered in the development of the 411th EMS, and describes the process for tracking changes to regulatory requirements. There were no findings for this EMS element.

3.5 OBJECTIVES AND TARGETS (ISO 14001, Section 4.3.3).

Requirement: The organization shall establish and maintain documented environmental objectives and targets, at each relevant function and level within the organization.

When establishing and reviewing its objectives, an organization shall consider the legal and other requirements; its significant environmental aspects; its technological options; its financial, operational, and business requirements; and the views of interested parties.

The objectives and targets shall be consistent with the environmental policy, including the commitment to prevention of pollution.

<u>Findings and Observations:</u> Procedures to identify targets and objectives had been developed, but targets and objectives had not yet been identified. However, setting of targets and objectives was expected to occur following the next 411th BSB CFT meeting. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-03

ISO 14001 ELEMENT: 4.3.3 (OBJECTIVES AND TARGETS)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: Targets and Objectives had not been identified.

CRITERIA: O7.20.3.A - When implementing ISO 14001, clause 4.3.3, the installation must establish and maintain documented environmental objectives and targets, at each relevant function and level within the organization.

FINDING COMMENTS: Procedures for setting objectives and targets for significant aspects had been developed. Procedure Number EMS-4.3.3 provides an overview for identifying Objectives and Targets based on the Significant Aspects. The BSB CFT is expected to identify Objects and Targets at their next scheduled meeting.

3.6 ENVIRONMENTAL MANAGEMENT PROGRAMS (ISO 14001, Section 4.3.4)

<u>Requirement</u>: The organization shall establish and maintain programs for achieving its objectives and targets. It shall include:

- a. Designation of responsibility for achieving objectives and targets at each relevant function and level of the organization;
- b. The means and time-frame by which they are to be achieved.

If a project relates to new developments and new or modified activities, products or services, programs shall be amended where relevant to ensure that environmental management applies to such projects.

<u>Findings and Observations</u>: Procedure Number EMS-4.3.4 provides an overview for developing and maintaining management programs with respect to their objectives and targets. Because objectives and targets had not been established at the time of the site visit, management programs were not yet in place.

FINDING ID: 411THBSB-DH-04

ISO 14001 ELEMENT: 4.3.4 (ENVIRONMENTAL MANAGEMENT PROGRAMS)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: Procedure Number EMS-4.3.4 provides an overview for developing and maintaining management programs with respect to their objectives and targets. Because objectives and targets had not been established at the time of the site visit, management programs were not yet in place.

CRITERIA: O7.20.4.A -When implementing ISO 14001, clause 4.3.4, the installation is required to establish and maintain programs for achieving its objectives and targets.

3.7 STRUCTURE AND RESPONSIBILITY (ISO 14001, SECTION 4.4.1)

Requirement: Roles, responsibilities, and authorities shall be defined, documented, and communicated in order to facilitate effective environmental management.

Management shall provide resources essential to the implementation and control of the EMS. Resources include human resources and specialized skills, technology, and financial resources.

The organization's top management shall appoint a specific management representative who, irrespective of other responsibilities, shall have defined roles, responsibilities, and authority for:

- a. Ensuring that EMS requirements are established, implemented, and maintained in accordance with this International Standard;
- b. Reporting on the performance of the EMS to top management for review and as a basis for improvement of the EMS.

Findings and Observations: Procedure Number EMS-4.4.1 provides an overview of the 411th BSB EMS structure and the responsibilities of key 411th BSB and tenant activity personnel. The 411th BSB had identified an EMS manager, with responsibility to establish, implement and maintain an EMS. The EMS manager regularly reports to the EQCC on the status of the EMS implementation. There were no findings for this EMS element.

3.8 TRAINING, AWARENESS, AND COMPETENCE (ISO 14001, SECTION 4.4.2)

Requirement: The organization shall identify training needs. It shall require that all personnel, who whose work may create a significant impact upon the environment, have received appropriate training.

It shall establish and maintain procedures to make its employees or members at each relevant function and level aware of:

- a. The importance of conformance with the environmental policy and procedures and with the requirements of the EMS;
- b. The significant environmental impacts, actual or potential, or their work activities and environmental benefits of improved performance;
- c. Their roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirements of the EMS, including emergency preparedness and response requirements;
- d. The potential consequences of departure from specified operating procedures.

Personnel performing those tasks that cause significant environmental impacts shall be competent on the basis of appropriate education, training, and/or experience.

<u>Findings and Observations:</u> Procedure EMS-4.4.2 provides an overview of the EMS training process. Though general awareness training has been provided to senior leadership, additional awareness training will be required for all personnel. Additionally, training for individuals who could have a direct impact on significant aspects will need to be completed. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-05

ISO 14001 ELEMENT: 4.4.2 (TRAINING, AWARENESS, AND COMPETENCE)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: General awareness training for all personnel and competence training for individuals having a direct impact on significant aspects had not yet been completed.

CRITERIA: O7.30.2.A - When implementing ISO 14001, clause 4.4.2, training needs must be identified for all personnel whose work may create a significant impact upon the environment.

MCHB-TS-EHM

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RECOMMENDATIONS: Continue with efforts to present general awareness training to all BSB personnel; implement competence training for those individuals having a direct impact on significant aspects. Making the EMS web based general awareness training available on the BSB web site will greatly assist in reaching all BSB personnel.

3.9 COMMUNICATION (ISO 14001, SECTION 4.4.3)

Requirement: With regard to its environmental aspects and EMS, the organization shall establish and maintain procedures for:

- a. Internal communication between the various levels and functions of the organization;
- b. Receiving, documenting and responding to relevant communication from external interested parties.

The organization shall consider processes of external communication on its significant environmental aspects and record its decision.

Findings and Observations: Procedure Number EMS-4.4.3 provides an overview of the procedures used by the 411th BSB for both internal and external communication. This procedure states that Public Affairs Office (PAO) documents incoming calls, which based on auditor interviews with PAO, consists of establishing a hard copy file folder IF the issue is expected to be significant. While this procedure, coupled with the EMS Communications Log maintained by the 411th BSB EMO, satisfy the requirements of this standard, a more permanent and documented PAO mechanism for tracking external communication (such as a PAO communication log) will provide consistency in documenting communication with external parties. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-06

ISO 14001 ELEMENT: 4.4.3 (COMMUNICATION)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: A documented mechanism is needed by PAO for tracking external communication.

CRITERIA: O7.30.3.US - The facility/organization should have, and implement, internal and external communication processes on environmental management issues

RECOMMENDATIONS: Establish a tracking log within PAO to provide consistency in documenting communication with external parties.

3.10 ENVIRONMENTAL MANAGEMENT SYSTEM DOCUMENTATION (ISO 14001, SECTION 4.4.4)

<u>Requirement</u>: The organization shall establish and maintain information, in paper or electronic form, to:

- a. Describe the core elements of the management system and their interaction;
- b. Provide direction to related documentation

<u>Findings and Observations:</u> Procedure Number EMS-4.4.4 provides an overview for EMS documentation procedures. Part of these procedures involves developing an intranet web site to document its EMS. Activation was expected to occur soon after the site visit. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-07

ISO 14001 ELEMENT: 4.4.4 (ENVIRONMENTAL MANAGEMENT SYSTEM

DOCUMENTATION) **LOCATION:** 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: The 411th BSB did not have a functioning mechanism for describing the core elements of their EMS and their interaction, or a mechanism for providing directions to related documentation.

CRITERIA: O7.30.4.A - When implementing ISO 14001, clause 4.4.4, the installation is required to establish and maintain information, in paper or electronic form, to identify the core elements or its EMS and how they interact with each other.

RECOMMENDATIONS: Activate the already developed 411th BSB EMS web site on the 411th BSB main server.

3.11 DOCUMENT CONTROL (ISO 14001, SECTION 4.4.5)

Requirement: The organization shall establish and maintain procedures for controlling all documents required by this International standard to ensure that:

- a. They can be located;
- b. They are periodically reviewed, revised as necessary, and approved for adequacy by authorized personnel;
- c. The current versions of relevant documents are available at all locations where operations essential to the effective functioning of the EMS are performed;
- d. Obsolete documents are promptly removed from all points of issue and points of use, or otherwise assured against unintended use;
- e. Any obsolete documents retained for legal and/or knowledge preservation purposes are suitably identified.

Documentation shall be legible, dated (with dates of revision) and readily identifiable, maintained in an orderly manner, and maintained for a specific period. Procedures and responsibilities shall be established for the creation and modification of various types of documents.

<u>Findings and Observations:</u> The Army Records Information Management System (ARIMS) currently serves as the basis for document control procedures. Procedure Number EMS-4.4.5 specifically addresses EMS related document control requirements. The procedures has been developed but not yet implemented. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-08

ISO 14001 ELEMENT: 4.4.5 (DOCUMENT CONTROL)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: EMS related document control procedures were not in place.

CRITERIA: O7.30.5.A - When implementing ISO 14001, clause 4.4.5, the installation shall establish and maintain procedures for controlling all documents required by ISO 14001.

FINDING COMMENTS: The adoption of the intranet based EMS website will significantly enhance document control capabilities.

RECOMMENDATIONS: Proceed with staffing of the draft document control procedures and implement as soon as possible.

3.12 OPERATIONAL CONTROL (ISO 14001, SECTION 4.4.6)

Requirement: The organization shall identify those operations and activities that are associated with the identified significant environmental aspects in line with its policy, objectives, and targets. The organization shall plan these activities, including maintenance, in order to ensure that they are carried out under specified conditions by:

- Establishing and maintaining documented procedures to cover situations where their absence could lead to deviations for the environmental policy and the objectives and targets;
- b. Stipulating operating criteria in the procedures;
- c. Establishing and maintaining procedures related to the identifiable significant environmental aspects of goods and services used by the organization and communicating relevant procedures and requirements to suppliers and contractors.

<u>Findings and Observations:</u> Compliance related operational controls (e.g. Spill Prevention Control and Countermeasures Plan, Installation Spill Contingency Plan, Hazardous Waste Management Plan), have been established for several potentially environmentally significant operations. In addition, an overview for developing operational controls has been developed in Procedure Number EMS-4.4.6. Procedures to incorporate operational controls for separate objectives and targets under EMS have not yet been implemented. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-09

ISO 14001 ELEMENT: 4.4.6 (OPERATIONAL CONTROL)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: Controls for operations and activities associated with significant environmental aspects had not been identified.

CRITERIA: O7.30.6.A - When implementing ISO 14001, clause 4.4.6, the installation must identify its activities and tasks that are associated with significant environmental aspects.

FINDING COMMENTS: At the time of the site visit, specific EMS objectives and targets had not been established; consequently operational controls had not yet been established.

RECOMMENDATIONS: Proceed with identification of objectives and targets, and development of operational controls.

3.13 EMERGENCY PREPAREDNESS AND RESPONSE (ISO 14001, SECTION 4.4.7)

Requirement: The organization shall establish and maintain procedures to identify potential for and respond to accidents and emergency situations, and for preventing and mitigating the environmental impacts that may be associated with them.

The organization shall review and revise, where necessary, its emergency preparedness and response procedures, in particular, after the occurrence of accidents or emergency situations.

The organization shall also periodically test such procedures where practicable.

<u>Findings and Observations:</u> Spill plans and emergency procedures are in place; response drills are conducted on a regular basis. There were no findings for this EMS element.

3.14 MONITORING AND MEASUREMENT (ISO 14001, SECTION 4.5.1)

Requirement: The organization shall establish and maintain documented procedures to monitor and measure, on a regular basis, the key characteristics of its operations and activities that can have a significant impact on the environment. This shall include the recording of information to track performance, relevant operational controls and conformance with the organization's environmental objectives and targets.

Monitoring equipment shall be calibrated and maintained, and records of this process shall be retained according to the organization's procedures.

The organization shall establish and maintain a documented procedure for periodically evaluating compliance with relevant environmental legislation and regulations.

Findings and Observations: The Environmental Performance Assessment System (EPAS) and the 411th BSB hazardous waste inspections address the portion of the ISO 14001 requirement for periodic evaluations of compliance with environmental regulations. Procedure Number EMS-4.5.1 addresses monitoring conformance with the organizations environmental objectives and targets; however it had not been implemented at the time of the site visit because objectives and targets had not yet been developed. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-10

ISO 14001 ELEMENT: 4.5.1 (MONITORING AND MEASUREMENT)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: Procedures for monitoring EMS related issues, such as operations controls and conformance to the 411th BSB objectives and targets, had not been implemented.

CRITERIA: O7.40.1.A - When implementing ISO 14001, clause 4.5.1, the installation is required to develop and maintain documented procedures to monitor and measure, on a routine basis, the key characteristics of its activities and tasks that can have a significant impact on the environment.

RECOMMENDATIONS: Once targets, objectives and operational controls have been developed, begin a periodic monitoring program for theses EMS standards.

3.15 NONCONFORMANCE AND CORRECTIVE AND PREVENTIVE ACTION (ISO 14001, Section 4.5.2)

Requirement: The organization shall establish and maintain procedures for defining responsibility and authority for handling and investigating nonconformance; taking action to mitigate any impacts caused; and for initiating and completing corrective and preventive action.

Any corrective or preventive action taken to eliminate the causes of actual and potential nonconformances shall be appropriate to the magnitude of the problems and commensurate with the environmental impact encountered.

The organization shall implement and record any changes in the documented procedures resulting form corrective and preventive action.

<u>Findings and Observations:</u> Procedures were in place to address nonconformance and corrective actions for regulatory compliance deficiencies. Procedure Number EMS-4.5.2 establishes procedures for addressing corrective actions associated with nonconformance to elements of the EMS; however, the procedures had not yet been implemented. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-11

ISO 14001 ELEMENT: 4.5.2 (NONCONFORMANCE AND CORRECTIVE AND

PREVENTIVE ACTION) **LOCATION:** 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: Procedures have not been implemented for dealing with actual and potential nonconformance associated with elements of the EMS, or for taking corrective/preventive actions.

CRITERIA: O7.40.2.A - When implementing ISO 14001, clause 4.5.2, the installation is required to develop and revise procedures for defining responsibility and authority for handling and investigating non-conformance, taking action to mitigate any impacts caused and for initiating and completing corrective and preventive action.

RECOMMENDATIONS: Enhance current regulatory compliance corrective action systems to include corrective actions associated with nonconformance to the EMS.

3.16 RECORDS (ISO 14001, Section 4.5.3)

Requirement: The organization shall establish and maintain procedures for the identification, maintenance, and disposition of environmental records. These records shall include training records and the results of audits and reviews.

Environmental records shall be legible, identifiable and traceable to the activity, product or service involved. Environmental records shall be stored and maintained in such a way that they are readily retrievable and protected from damage, deterioration, or loss. Their retention times shall be established and recorded.

Records shall be maintained, as appropriate to the system and to the organization, to demonstrate conformance to this International Standard

<u>Findings and Observations:</u> Procedure Number EMS-4.5.3 has been developed for maintaining a formal procedure for specific EMS-related documentation; however the procedure has not yet been implemented. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-12

ISO 14001 ELEMENT: 4.5.3 (RECORDS)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: Procedures have not been implemented for EMS-related record control.

CRITERIA: O7.40.3.A - When implementing ISO 14001, clause 4.5.3, the installation is required to develop and revise as necessary procedures for the identification, maintenance and disposition of the environmental records.

3.17 ENVIRONMENTAL MANAGEMENT SYSTEM AUDIT (ISO 14001, SECTION 4.5.4)

Requirement: The organization shall establish and maintain programs and procedures for periodic EMS audits to be carried out in order to:

- a. Determine whether or not the EMS (1) conforms to planned arrangements for environmental management including the requirements of this International Standard; and (2) has been properly implemented and maintained; and
- b. Provide information on the results of audits to management.

The organization's audit program, including any schedule, shall be based on the environmental importance of the activity concerned and the results of previous audits. In order to be comprehensive, the audit procedures shall cover the audit scope, frequency, and methodologies, as well as the responsibilities and requirements for conducting audits and reporting results.

<u>Findings and Observations:</u> Procedure Number EMS-4.5.4 has been developed for internal EMS audits, but internal audits have not yet been performed because the EMS has not yet been fully implemented. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-13

ISO 14001 ELEMENT: 4.5.4 (ENVIRONMENTAL MANAGEMENT SYSTEM AUDIT)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: Procedures have not been implemented for EMS audits.

CRITERIA: O7.40.4.A - When implementing ISO 14001, clause 4.5.4, the installation is required to establish and maintain a program and procedures for periodic environmental management system audits to be carried out, in order to determine if the EMS conforms to the ISO 14001 requirements, and is properly implemented and maintained.

3.18 MANAGEMENT REVIEW (ISO 14001, SECTION 4.6)

Requirement: The organization's top management shall, at intervals that it determines, review the EMS to ensure its continuing suitability, adequacy, and effectiveness. The management review process shall ensure that the necessary information is collected to allow management to carry out this evaluation. This management review shall be documented.

The management review shall address the possible need for changes to policy, objectives and other elements of the EMS, in light of EMS audit results, changing circumstances, and the commitment to continual improvement.

<u>Findings and Observations:</u> Procedures have been developed for management reviews, but a management review has not been performed yet because the EMS is not yet fully implemented. There was one finding for this element of the EMS.

FINDING ID: 411THBSB-DH-14

ISO 14001 ELEMENT: 4.6 (MANAGEMENT REVIEW)

LOCATION: 411TH BSB

FACILITY TYPE: ADMINISTRATIVE HEADQUARTERS

FINDING DESCRIPTION: A management review has not been performed.

CRITERIA: O7.50.1.A - When implementing ISO 14001, clause 4.6.1, the Installation's top management is required to review and document the EMS, to ensure its continual improvement, adequacy and effectiveness.

FINDING COMMENTS: The strength of the EQCC and the CFT will be instrumental to a successful management review.

APPENDIX A

GLOSSARY OF ACRONYMS

ANSI American National Standards Institute

ARIMS Army Records Information Management System

ASG Area Support Group
BSB Base Support Battalion
CFT Cross Functional Team
DPW Directorate of Public Works

EMO Environmental Management Office EMS Environmental Management System

EO Executive Order

EQCC Environmental Quality Control Committee
IMA-E Installation Management Agency-Europe
ISO International Organization for Standardization

PAO Public Affairs Office

RAB Registrar Accreditation Board SOP Standing Operating Procedure

USACHPPM U.S. Army Center for Health Promotion and Preventive Medicine